

CLAIMS

What is claimed is:

S5
A1

1. An electronic component, comprising:

a substrate layer; and

an insulator layer coupled to the substrate layer, wherein the insulator layer comprises at least two different kinds of embedded passive components.

2. The electronic component of claim 1, further comprising at least one additional layer coupled to the insulator layer.

3. The electronic component of claim 2, wherein the at least one additional layer comprises at least one of a metal, a polymer, an inorganic compound, a monomer, an organometallic compound and a metal alloy.

4. The electronic component of claim 1, wherein the electronic component is a printed circuit board.

5. The electronic component of claim 1, wherein the substrate layer comprises at least one layer.

6. The electronic component of claim 5, wherein the substrate layer comprises a silicon wafer.

7. The electronic component of claim 6, wherein the substrate layer further comprises a layer of conductive material.

8. The electronic component of claim 7, wherein the layer of conductive material comprises copper or nickel.

9. The electronic component of claim 1, wherein the insulator layer is coupled to the substrate layer by a laminating material.

10. The electronic component of claim 1, wherein the insulator layer comprises at least one of a polycarbonate, a fused silica compound and an alumina compound.

11. The electronic component of claim 1, wherein the at least two embedded passive components comprises a resistor and a capacitor.

12. An electronic product comprising the electronic component of claim 1.

13. A method of producing a layer having at least two different kinds of embedded passive components, comprising

imaging an insulator layer to create a first pattern on the insulator layer;
etching the first pattern on the insulator layer to create a first compartment in the
insulator layer;
filling the first compartment with a first material to form a first passive component;
5 imaging the insulator layer to create a second pattern on the insulator layer;
etching the second pattern on the insulator layer to create a second compartment in the
insulator layer; and
filling the second compartment with a second material to form a second passive
component.

- 10 14. The method of claim 13, wherein the first and second passive components are
different components.
15. The method of claim 13, wherein the first passive component is a resistor and the
second passive component is a capacitor.
16. The method of claim 13, wherein the passive components comprise a resistor paste
and a capacitor paste.
17. The method of claim 13, wherein coupling at least one additional layer comprises
coupling a laminating material.